RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _10/527,646_

Source: _PCT/10_

Date Processed by STIC: _3/25/05_

ENTERED

RAW SEQUENCE LISTING   DATE: 03/25/2005
PATENT APPLICATION: US/10/527,646   TIME: 11:08:30

Input Set : A:\2958-131.txt
Output Set: N:\CRF4\03252005\J527646.raw

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 3 <110> APPLICANT: Nitsch, Robert
 4        Ninnemann, Olaf
 5        Braeuer, Anja
 6        Savaskan, Nicolai
 8 <120> TITLE OF INVENTION: Lipid Phosphate Phosphatases and Uses Therefor for Treating
 9        Neuronal Diseases
11 <130> FILE REFERENCE: 2958-131
C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/527,646
C--> 13 <141> CURRENT FILING DATE: 2005-03-14
13 <150> PRIOR APPLICATION NUMBER: PCT/EP2003/010228
14 <151> PRIOR FILING DATE: 2003-09-15
16 <150> PRIOR APPLICATION NUMBER: 03002993.8
17 <151> PRIOR FILING DATE: 2003-02-11
19 <150> PRIOR APPLICATION NUMBER: 02020679.3
20 <151> PRIOR FILING DATE: 2002-09-13
22 <160> NUMBER OF SEQ ID NOS: 38
24 <170> SOFTWARE: PatentIn version 3.3
26 <210> SEQ ID NO: 1
27 <211> LENGTH: 763
28 <212> TYPE: PRT
29 <213> ORGANISM: Homo sapiens
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42          35                  40                  45
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46      50                  55                  60
49 Thr Leu Leu Pro Cys Phe Tyr Phe Val Glu Leu Pro Ile Leu Ala Ser
50 65                  70                  75                  80
53 Ser Val Val Ser Leu Tyr Phe Leu Glu Leu Thr Asp Val Phe Lys Pro
54                  85                  90                  95
57 Val His Ser Gly Phe Ser Cys Tyr Asp Arg Ser Leu Ser Met Pro Tyr
58              100                 105                 110
61 Ile Glu Pro Thr Gln Glu Ala Ile Pro Phe Leu Met Leu Leu Ser Leu
62              115                 120                 125
65 Ala Phe Ala Gly Pro Ala Ile Thr Ile Met Val Gly Glu Gly Ile Leu
66          130                 135                 140
69 Tyr Cys Cys Leu Ser Lys Arg Arg Asn Gly Val Gly Leu Glu Pro Asn
70 145                 150                 155                 160
73 Ile Asn Ala Gly Gly Cys Asn Phe Asn Ser Phe Leu Arg Arg Ala Val
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81 Thr Asp Ile Ile Gln Leu Ser Thr Gly Tyr Gln Ala Pro Tyr Phe Leu
82         195              200              205
85 Thr Val Cys Lys Pro Asn Tyr Thr Ser Leu Asn Val Ser Cys Lys Glu
86     210              215              220
89 Asn Ser Tyr Ile Val Glu Asp Ile Cys Ser Gly Ser Asp Leu Thr Val
90 225              230              235              240
93 Ile Asn Ser Gly Arg Lys Ser Phe Pro Ser Gln His Ala Thr Leu Ala
94              245              250              255
97 Ala Phe Ala Ala Val Tyr Val Ser Met Tyr Phe Asn Ser Thr Leu Thr
98              260              265              270
101 Asp Ser Ser Lys Leu Leu Lys Pro Leu Leu Val Phe Thr Phe Ile Ile
102         275              280              285
105 Cys Gly Ile Ile Cys Gly Leu Thr Arg Ile Thr Gln Tyr Lys Asn His
106     290              295              300
109 Pro Val Asp Val Tyr Cys Gly Phe Leu Ile Gly Gly Gly Ile Ala Leu
110 305              310              315              320
113 Tyr Leu Gly Leu Tyr Ala Val Gly Asn Phe Leu Pro Ser Asp Glu Ser
114              325              330              335
117 Met Phe Gln His Arg Asp Ala Leu Arg Ser Leu Thr Asp Leu Asn Gln
118         340              345              350
121 Asp Pro Asn Arg Leu Leu Ser Ala Lys Asn Gly Ser Ser Ser Asp Gly
122         355              360              365
125 Ile Ala His Thr Glu Gly Ile Leu Asn Arg Asn His Arg Asp Ala Ser
126     370              375              380
129 Ser Leu Thr Asn Leu Lys Arg Ala Asn Ala Asp Val Glu Ile Ile Thr
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133 Pro Arg Ser Pro Met Gly Lys Glu Asn Met Val Thr Phe Ser Asn Thr
134         405              410              415
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145 Thr Gln Trp Lys Asn Lys Asn Glu Ser Arg Lys Leu Ser Leu Gln Val
146     450              455              460
149 Ile Glu Pro Glu Pro Gly Gln Ser Pro Pro Arg Ser Ile Glu Met Arg
150 465              470              475              480
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154         485              490              495
157 Pro Gly Asn Gln Tyr Leu Lys Ile Gln Pro Gly Ala Val Pro Gly Cys
158         500              505              510
161 Asn Asn Ser Met Pro Gly Gly Pro Arg Val Ser Ile Gln Ser Arg Pro
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177 Met Gln Val Ile Ala Met Ser Lys Gln Gln Gly Val Leu Gln Ser Ser
178             580             585             590
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182         595             600             605
185 Tyr Lys Thr Leu Thr Asp His Glu Pro Ser Gly Ile Val Arg Val Glu
186         610             615             620
189 Ala His Pro Glu Asn Asn Arg Pro Ile Ile Gln Ile Pro Ser Thr Glu
190 625             630             635             640
193 Gly Glu Gly Ser Gly Ser Trp Lys Trp Lys Ala Pro Glu Lys Gly Ser
194             645             650             655
197 Leu Arg Gln Thr Tyr Glu Leu Asn Asp Leu Asn Arg Asp Ser Glu Ser
198             660             665             670
201 Cys Glu Ser Leu Lys Asp Ser Phe Gly Ser Gly Asp Arg Lys Arg Ser
202         675         .       680             685
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206         690             695             700
209 Val Thr Pro Val Glu Gly Ser Glu Ile Gly Ser Glu Thr Leu Ser Ile
210 705             710             715             720
213 Ser Ser Ser Arg Asp Ser Thr Leu Arg Arg Lys Gly Asn Ile Ile Leu
214             725             730             735
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227 <212> TYPE: PRT
228 <213> ORGANISM: Homo sapiens
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236 Leu Leu Pro Cys Phe Tyr Phe Val Glu Leu Pro Ile Val Ala Ser Ser
237             20              25              30
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241         35              40              45
244 Lys Val Gly Phe Gln Cys Tyr Asp Arg Thr Leu Ser Met Pro Tyr Val
245     50              55              60
248 Glu Thr Asn Glu Glu Leu Ile Pro Leu Leu Met Leu Leu Ser Leu Ala
249 65              70              75              80
252 Phe Ala Ala Pro Ala Ala Ser Ile Met Val Ala Glu Gly Met Leu Tyr
253             85              90              95
256 Cys Leu Gln Ser Arg Leu Trp Gly Arg Ala Gly Gly Pro Ala Gly Ala
257             100             105             110
260 Glu Gly Ser Ile Asn Ala Gly Gly Cys Asn Phe Asn Ser Phe Leu Arg
261         115             120             125
264 Arg Thr Val Arg Phe Val Gly Val His Val Phe Gly Leu Cys Ala Thr
265     130             135             140
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268 Ala Leu Val Thr Asp Val Ile Gln Leu Ala Thr Gly Tyr His Thr Pro
269 145             150             155             160
272 Phe Phe Leu Thr Val Cys Lys Pro Asn Tyr Thr Leu Leu Gly Thr Ser
273  .               165             170             175
276 Cys Glu Val Asn Pro Tyr Ile Thr Gln Asp Ile Cys Ser Gly His Asp
277             180             185             190
280 Ile His Ala Ile Leu Ser Ala Arg Lys Thr Phe Pro Ser Gln His Ala
281             195             200             205
284 Thr Leu Ser Ala Phe Ala Ala Val Tyr Val Ser Val Ser Pro Ala Pro
285     210             215             220
288 His Cys Pro Ser Gln Ala Leu Leu Leu Thr Arg Gly Glu Pro Ser Leu
289 225             .   230             235             240
292 Thr Pro Thr Pro Met Pro Gln Met Tyr Phe Asn Ser Val Ile Ser Asp
293  .               245             250             255
296 Thr Thr Lys Leu Leu Lys Pro Ile Leu Val Phe Ala Phe Ala Ile Ala
297             260             265             270
300 Ala Gly Val Cys Gly Leu Thr Gln Ile Thr Gln Tyr Arg Ser His Pro
301         275             280             285
304 Val Asp Val Tyr Ala Gly Phe Leu Ile Gly Ala Gly Ile Ala Ala Tyr
305     290             295             300
308 Leu Ala Cys His Ala Val Gly Asn Phe Gln Ala Pro Pro Ala Glu Lys
309 305             310             315             320
312 Pro Ala Ala Pro Ala Pro Ala Lys Asp Ala Leu Arg Ala Leu Thr Gln
313             325             330             335
316 Arg Gly His Asp Ser Val Tyr Gln Gln Asn Lys Ser Val Ser Thr Asp
317         340             345             350
320 Glu Leu Gly Pro Pro Gly Arg Leu Glu Gly Ala Pro Arg Pro Val Ala
321     355             360             365
324 Arg Glu Lys Thr Ser Leu Gly Ser Leu Lys Arg Ala Ser Val Asp Val
325     370             375             380
328 Asp Leu Leu Ala Pro Arg Ser Pro Met Ala Lys Glu Asn Met Val Thr
329 385             .   390             395             400
332 Phe Ser His Thr Leu Pro Arg Ala Ser Ala Pro Ser Leu Asp Asp Pro
333             405             410             415
336 Ala Arg Arg His Met Thr Ile His Val Pro Leu Asp Ala Ser Arg Ser
337         420    .        425             430
340 Lys Gln Leu Ile Ser Glu Trp Lys Gln Lys Ser Leu Glu Gly Arg Gly
341     435             440             445
344 Leu Gly Leu Pro Asp Asp Ala Ser Pro Gly His Leu Arg Ala Pro Ala
345     450             455             460
348 Glu Pro Met Ala Glu Glu Glu Glu Glu Glu Asp Glu Glu Glu Glu
349 465             470             475             480
352 Glu Glu Glu Glu Glu Glu Glu Asp Glu Gly Pro Ala Pro Pro Ser Leu
353             485             490             495
356 Tyr Pro Thr Val Gln Ala Arg Pro Gly Leu Gly Pro Arg Val Ile Leu
357         500             505             510
360 Pro Pro Arg Ala Gly Pro Pro Pro Leu Val His Ile Pro Glu Glu Gly
361     515             520             525
364 Ala Gln Thr Gly Ala Gly Leu Ser Pro Lys Ser Gly Ala Gly Val Arg
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365      530                    535                   540
368 Ala Lys Trp Leu Met Met Ala Glu Lys Ser Gly Ala Ala Val Ala Asn
369 545                    550                   555                   560
372 Pro Pro Arg Leu Leu Gln Val Ile Ala Met Ser Lys Ala Pro Gly Ala
373                    565                   570                   575
376 Pro Gly Pro Lys Ala Ala Glu Thr Ala Ser Ser Ser Ser Ala Ser Ser
377                    580                   585                   590
380 Asp Ser Ser Gln Tyr Arg Ser Pro Ser Asp Arg Asp Ser Ala Ser Ile
381                    595                   600                   605
384 Val Thr Ile Asp Ala His Ala Pro His His Pro Val Val His Leu Ser
385               610                   615                   620
388 Ala Gly Gly Ala Pro Trp Glu Trp Lys Ala Ala Gly Gly Gly Ala Lys
389 625                    630                   635                   640
392 Ala Glu Ala Asp Gly Gly Tyr Glu Leu Gly Asp Leu Ala Arg Gly Phe
393                    645                   650                   655
396 Arg Gly Gly Ala Lys Pro Pro Gly Val Ser Pro Gly Ser Ser Val Ser
397                    660                   665                   670
400 Asp Val Asp Gln Glu Glu Pro Arg Phe Gly Ala Val Ala Thr Val Asn
401               675                   680                   685
404 Leu Ala Thr Gly Glu Gly Leu Pro Pro Leu Gly Ala Ala Asp Gly Ala
405               690                   695                   700
408 Leu Gly Pro Gly Ser Arg Glu Ser Thr Leu Arg Arg His Ala Gly Gly
409 705                    710                   715                   720
412 Leu Gly Leu Ala Glu Arg Glu Ala Glu Ala Glu Ala Glu Gly Tyr Phe
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422 <212> TYPE: PRT
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436               35                   40                   45
439 Phe Cys Gln Asp Gly Asp Leu Met Lys Pro Tyr Pro Gly Thr Glu Glu
440 50                   55                   60
443 Glu Ser Phe Ile Thr Pro Leu Val Leu Tyr Cys Val Leu Ala Ala Thr
444 65                   70                   75                   80
447 Pro Thr Ala Ile Ile Phe Ile Gly Glu Ile Ser Met Tyr Phe Ile Lys
448               85                   90                   95
451 Ser Thr Arg Glu Ser Leu Ile Ala Gln Glu Lys Thr Ile Leu Thr Gly
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455 Glu Cys Cys Tyr Leu Asn Pro Leu Leu Arg Arg Ile Ile Arg Phe Thr
456               115                   120                   125
459 Gly Val Phe Ala Phe Gly Leu Phe Ala Thr Asp Ile Phe Val Asn Ala
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 03/25/2005
PATENT APPLICATION: US/10/527,646   TIME: 11:08:31

Input Set : A:\2958-131.txt
Output Set: N:\CRF4\03252005\J527646.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:17; N Pos. 460
Seq#:21; N Pos. 1137,2899,2917,2918,2919,2921,2922,2923,2924,2929

VERIFICATION SUMMARY   DATE: 03/25/2005
PATENT APPLICATION: US/10/527,646   TIME: 11:08:31

Input Set : **A:\2958-131.txt**
Output Set: **N:\CRF4\03252005\J527646.raw**

L:13 M:270 C: Current Application Number differs, Replaced Current Application No
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:2196 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:420
L:2774 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:1080
M:341 Repeated in SeqNo=21